

**CORRECTED COPY**

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*Civil Engineer***SHEPPARD AIR FORCE BASE FIRE PROTECTION PROGRAM****COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

OPR: 82 CES/CEF (Chief William F. Bennyhoff)
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This instruction implements AFPD 32-20, Fire Protection. This instruction establishes the responsibilities and procedures for the Fire Prevention Program. It provides the guidance and authority for establishing and conducting an effective, aggressive, and integrated fire prevention program. The objective is preventing real property, material, aerospace vehicles, environmental damage and most importantly, personnel losses by fire/hazardous material releases. It applies to all base personnel, tenant activities, housing occupants, contractors, concessionaires and other areas under the jurisdiction of the United States Government at Sheppard Air Force Base, Frederick Auxiliary Field, and Lake Texoma Recreation Annex. Compliance with this instruction is imperative to avoid fires/hazardous material releases which could jeopardize lives, property, and the mission of Sheppard Air Force Base and the United States Air Force. Violators of this instruction are subject to prosecution under the Uniform Code of Military Justice, 1984 (Rev). (Civilian employees may be disciplined under the appropriate Air Force directive.)

SUMMARY OF REVISIONS

This instruction was revised to reflect current fire prevention procedures. It provides general fire safety procedures for all personnel and specific guidelines for the various occupancies. Facility Managers are responsible for hanging fire extinguishers was added. An “*” indicates revisions from the previous edition.

1. Publicity: This instruction should be maintained in a readily accessible location for all personnel. Suggested locations include; organizational bulletin boards, facility manager’s guide, unit safety representative folders or all of the above.

2. Authority:

2.1. The Base Civil Engineer, 82 CES/CE, is designated as the Base Fire Marshal and serves as staff advisor to the Wing Commander on fire protection/prevention matters. The Base Fire Marshal is authorized to direct stoppage of operations or processes considered to be a fire, explosion, or potential hazardous material release hazard.

2.2. The Base Fire Chief is responsible for the management and operation of the Base Fire Protection/Prevention Program. In the absence of the Base Civil Engineer, the Base Fire Chief acts as Base Fire Marshal.

3. Responsibilities:

3.1. The Base Fire Chief is responsible for managing the Fire Protection/Prevention Program. The Fire Chief is the final authority in cases where no particular criteria exists to regulate fire hazard conditions.

3.2. Commanders and supervisors are responsible for:

3.2.1. Maintaining all subordinate's records of fire prevention/extinguisher training.

3.2.2. Establishing and practicing sound fire prevention procedures in each activity or facility under their jurisdiction.

★3.2.3. Ensuring all newly assigned personnel receive fire prevention and fire extinguisher training (hands-on or academic instruction), within 30 days of assignment and annually thereafter.

3.2.4. Supporting the fire prevention program. Initiate appropriate administrative or disciplinary action against personnel responsible for fire loss through negligence, disregard for fire regulation, willful misconduct or gross negligence involving fire prevention practices.

3.3. Facility Managers are Responsible for:

3.3.1. Attending facility managers training annually. This training will be conducted at the base fire department on a quarterly basis.

3.3.2. Maintaining facility fire prevention information in a central location.

3.3.3. Accompanying the fire prevention technician during prevention visits.

3.3.4. Beginning corrective actions as annotated on the AF Form 1487, Fire Prevention Visit Report. Ensure the AF Form 1487, indicating actions taken and signed by the functional manager, is returned to the fire prevention section by the suspense date.

3.3.5. Working with the fire prevention technician and taking a pro-active role toward avoiding fire hazards and deficiencies.

3.3.6. Coordinating all AF Forms 332, (Base Civil Engineer Work Request), with the fire department.

3.3.7. Processing of flammable storage and corrosive storage locker requests which require the following items: hazardous materials inventory, flammable storage or corrosive storage authorization letters, to include a building diagram with storage area identified, through Fire Prevention Section.

3.3.8. Developing and posting fire evacuation plans (exit plans) in areas and buildings where exits are not readily apparent. These buildings include structures with complicated interior arrangements and hotel/motel type occupancies.

3.3.9. Inspecting fire extinguishers daily, and recording the inspection monthly on the fire extinguisher inspection form provided by the Fire Prevention Section.

3.3.10. Conducting a walk-through inspection of the facility each day, or prior to shift change. During inspection look for:

3.3.10.1. Hazardous processes underway without proper safety precautions in place.

3.3.10.2. All exit passageways and stairwells are free of obstructions.

3.3.10.3. All unnecessary appliances are unplugged.

3.3.10.4. All flammable, combustible and corrosive materials are in their proper storage areas.

3.3.10.5. All exit lights are properly illuminated.

3.3.10.6. Ensure every telephone has a 9-1-1 emergency reporting sticker affixed.

4. Implementing a Fire Prevention Program:

4.1. Using this instruction.

4.1.1. Read the entire instruction paying particular attention to the specific areas involving your responsibilities and operations.

4.1.2. Commander's, supervisor's and facility manager's duties are outlined in paragraph 3.

4.1.3. Paragraph 5, General Fire Safety and Prevention Principles, apply to all base personnel.

4.1.4. Paragraphs 6 through 17 cover fire prevention practices within specific occupancies or specific applications. Thoroughly review each section which applies to your area(s). Checklists specific to your areas will be provided to facility managers during quarterly training.

4.2. Limitations of this regulation. This regulation does not cover every possible fire prevention question. When in doubt, call the Fire Prevention Section, extension 6-2104, for clarification.

5. General Fire Safety and Prevention Principles:

5.1. Fire Reporting Procedures: Anyone discovering a fire (regardless of size or type), smelling smoke, gas, or seeing a hazardous substance spill, has the responsibility of notifying the Base Fire Department immediately. Follow the steps in the acronym of fire Reporting Procedures: (**SOUND, PHONE, EVACUATE, EXTINGUISH, and DIRECT, SPEED).**

5.1.1. **S**ound the alarm. Shout "Fire!, Fire!, Fire!" Pull the fire alarm pull box. (Do not activate alarm pull boxes during gas leaks.)

5.1.2. **P**hone the fire department from a safe location. Dial 9-1-1. Give name, building number, and location of fire. Do not hang up the phone until told to do so.

5.1.3. **E**vacuate personnel from the building. Help personnel requiring assistance reach the outside. Meet at an assembly point, well away from arriving fire apparatus. Never re-enter the building. (Assembly points are based on each facility evacuation plan.)

5.1.4. **E**xtinguish the fire, if possible, without risking injury. Use portable fire extinguishers, with the help of a "buddy," on small fires. Do not attempt to fight large fires. Warning. Fires produce dense smoke and toxic gases. Always leave yourself a way out. Fight the fire from a position of safety. If in doubt, get out!

5.1.5. **D**irect firefighters to the fire. Provide as much information as possible.

5.2. Portable Fire Extinguishers.

5.2.1. Portable fire extinguishers are provided in each base facility, excluding family housing residences. It is the responsibility of the individual to know where the extinguishers are located in their facilities, what type they are, and how to operate them.

***5.2.2.** Facility managers or designated representative are responsible for the inspection each month and the hanging of fire extinguishers, (when needed) within their respected building. Guidance will be obtained from the fire prevention section. Do not relocate extinguishers without the approval of the fire department.

5.2.3. Report any damaged or low pressure extinguisher to the facility manager immediately. The facility manager will bring the extinguisher to the fire department for a replacement. Facility managers are also responsible for transporting fire extinguishers requiring scheduled maintenance to the fire department.

***5.2.4.** The fire department will ensure fire extinguishers are provided for facilities. Fire extinguishers for vehicles are acquired by the using organization in accordance with AFOSH 91-56, after coordinating with the fire department to ensure the proper type is identified for procurement. All facility fire extinguishers, (except privately-owned extinguishers) will be tracked by the Base Fire Department to ensure the proper inspection and maintenance is performed.

***5.2.5.** Flight line extinguishers will only be used to support aircraft operations (not Hazardous Storage Areas).

***5.2.6.** Movement of flight line extinguishers is the responsibility of the user.

***5.2.7.** All personnel (i.e., student instructors) that have the need for flight line extinguishers have the responsibility to obtain annual training.

***5.2.8.** Objects (i.e., shirt, coat), of any kind will not be hung from the flight line extinguisher. A clear access path will be maintained at all times.

***5.2.9.** Fire Department Extinguisher Maintenance Technician will maintain all flight line extinguishers.

5.3. Installed Fire Detection and Suppression Systems.

5.3.1. Fire detection, fire alarm, and fire suppression systems are installed in base facilities for the purpose of protecting life and property. Any damage to the systems must be reported to the Base Fire Department immediately.

5.3.2. Building occupants will not attempt to repair, alter, or disable fire detection and suppression systems.

5.3.3. The use of installed alarm systems during evacuation drills must be coordinated with the fire department prior to the event.

5.3.4. The fire department and facility manager will be notified prior to any work being conducted on alarm, detection, or suppression systems.

5.3.5. The facility manager will notify occupants, and the base fire department (6-2104 or 6-2310), about tests (activation of alarm bells), and system outages affecting their facility.

5.4. Vehicle Parking and Traffic.

5.4.1. Vehicles will not be parked within 15 feet of fire hydrants or in areas designated as no parking or fire lanes.

5.4.2. Vehicles will not drive over fire department hoses.

5.4.3. Government and/or private vehicles (including forklifts and similar equipment) will not be parked or stored inside buildings or structures unless specifically designed for such use and approved by the fire department. Vehicles will not be parked in a hangar with aircraft.

5.4.4. Emergency vehicles responding to emergencies should be given the right-of-way. Clear intersections, move to the right side of the road, and stop until vehicles have passed. Do not follow firefighting vehicles closer than 500 feet.

5.4.5. Road blockages/closures will be coordinated with the fire department prior to the work beginning.

5.5. Smoking and Disposal of Smoking Materials.

5.5.1. Smoking in bed is prohibited. Smoking is permitted in designated areas only.

5.5.2. Smoking materials will not be carelessly disposed of inside or outside of a facility.

5.5.3. Adequate ash trays and metal receptacles with self-closing lids will be provided in all areas where smoking is permitted. Only ash trays that are designed to protect a cigarette left unattended will be used. The two-piece aluminum ash tray, Federal Stock Number (FSN) 9920-00-682-6757, is an example of an ash tray designed to protect an unattended cigarette.

5.5.4. Smoking materials will be soaked in water thoroughly prior to depositing in outside trash receptacles.

5.6. Use of Flexible Electrical Cords, Extension Cords and Multiple Outlet Devices.

***5.6.1.** The use of extension cords is prohibited except for use as temporary wiring and on a temporary basis (90-day certificate). When used on a temporary basis, the extension cord must be unplugged when unattended, not in use or permitted for use. Extension cords must be the three-prong type, a minimum of 16 American Wire Gauge (AWG) and Underwriter's Laboratory (UL) tested. Extension cords used for temporary wiring must be of a type identified for hard usage or extra-hard usage. Where used as approved temporary wiring the extension cord will serve only one piece of equipment, (120 volt 1 phase) have an capacity of 125 percent of equipment full load amps (not exceed 12 amps) and not be longer than 12 feet.

5.6.2. Extension cords and/or surge protectors will not be used to power major appliances i.e., microwave ovens, industrial equipment, refrigerators, space heaters, etc., unless approved by 82 CES/CEF on a temporary basis.

5.6.3. A multiple outlet device (to include surge protectors) may be used provided it is fused at no more than 15 amperes and has been tested by UL or FM and they are not plugged in on a piggy back configuration.

5.6.4. Flexible electrical cords, extension cords and multiple outlet devices cannot be used as a substitute for fixed wiring of a structure or where concealed behind walls, ceilings, or floors.

5.6.5. Flexible electrical cords, extension cords and multiple outlet devices cannot run through doorways, windows, or similar openings nor be attached to building surfaces.

5.6.6. Extension cords, flexible electrical cords or multiple outlet devices will be one continuous length of cord and will not be connected together to form a longer cord. This includes connecting an extension cord into a surge protector.

5.6.7. All flexible electrical cords, extension cords and multiple outlet devices will be in good repair: i.e., free of slices, splices, cuts, and compression damage. (Compression damage occurs when furniture, filing cabinets, etc., are placed on top of cords.)

5.6.8. All flexible electrical cords, extension cords and multiple outlet devices will have firmly attached plugs and connector ends and will not be wrapped around objects or coiled tightly into rolls.

5.6.9. Automatic timing devices allowing power supply to cooking appliances while unattended are prohibited. This specifically includes the use of automatic timers on but not limited to, coffee makers and similar cooking appliances.

5.7. Heating, Ventilation and Air Conditioning (HVAC).

5.7.1. Mechanical rooms for air-handlers, furnaces, and boilers will not be used to store materials except for minimal quantities directly related to the operation. Mechanical rooms will remain locked. Only authorized personnel will be permitted entry.

***5.7.2.** Auxiliary heating devices such as space heaters are prohibited, (excluding base housing units), except for medical reasons or where adequate heating is not provided by other means. A request for any auxiliary heating device will be sent to the appropriate Civil Engineer Area Maintenance Unit for approval, this form is generated by the appropriate area maintenance unit. Area maintenance unit will send completed form to Technical Service Section for coordination. We, in turn, will generate our approval letter for auxiliary heater with appropriate safety guidelines. Space heaters shall meet the following:

5.7.2.1. Space heaters will be UL or FM listed, self-contained, electrically powered, enclosed units equipped with a tip-over switch for automatic shut-off.

5.7.2.2. Space heaters will be given at least 36 inches of clearance when in use.

5.7.2.3. Space heaters will be unplugged when left unattended.

5.7.2.4. Space heaters to be used in a hazardous environment shall meet safety standards for the environment on a case-by-case basis as determined through a special inspection by the fire department.

5.8. Storage and Housekeeping.

5.8.1. Attic spaces, under floor areas, corridors, stairwells, or outside stairways will not be used for storage.

5.8.2. Recycle containers will be maintained in a neat manner. Paper will be compacted and stored away from ignition source.

5.8.3. Empty trash containers as required. Keep trash receptacles away from ignition sources.

5.8.4. Keep outside areas free of trash, weeds, high grass, or dried vegetation. Burning of leaves, grass and dried vegetation is prohibited.

5.8.5. Keep rags, steel wool, and used floor sweeping compound (i.e., Speedy-dry) in tightly covered metal containers. Mark the containers to indicate contents.

5.8.6. Clean lint, grease, dirt, and dust as often as necessary to prohibit a build-up of combustible material.

5.8.7. Keep all materials at least 18 inches from light fixtures, fire detectors, and sprinkler heads.

5.8.8. Do not store materials or place objects in front of fire alarm pull stations or fire extinguishers.

5.8.9. Storage facilities kept near any other structure will be kept in a neat orderly manner, no more than 5 gallons of gas at any one time. This storage facility is not a substitute for a flammable/combustible liquid locker.

5.9. Fireworks. Possession and/or use of fireworks of any kind is prohibited except when authorized by the Base Fire Chief.

5.10. Open Flame/Burning Devices.

5.10.1. Unless otherwise addressed in this instruction, use of open flame/burning devices are prohibited. Specific devices addressed include, but are not limited to candles, incense burners and potpourri pots.

5.10.2. Use of open flame/burning devices for special events may be considered for temporary approval by contacting the Fire Prevention Section. The final approval authority is the Base Fire Chief.

5.11. Fire Protection Markings.

5.11.1. Each facility, including military family housing units, will have the approved address posted on the facility where it is plainly visible from the street or road.

5.11.2. Fire symbols attached to the outside of buildings will not be removed without the approval of the Base Fire Chief.

5.11.3. Facilities containing significant types or amounts of hazardous material (as determined by fire department) will be readily identifiable from the exterior through the use of the appropriate fire symbol and/or National Fire Protection Association (NFPA) 704 symbol. Symbol requirements will be determined through a review of each facility Hazardous Material Inventory by 82 CEF and 82 CEV offices. Reviews are conducted during scheduled fire inspections and as needed due to changes in facility contents

5.12. Fire Hydrant, Post Indicator Valves, Sprinkler and Standpipe Connections.

5.12.1. Fire hydrants, post indicator valves, sprinkler and standpipe valves will not be used by anyone else other than Fire Department or Civil Engineer Craftsmen without the permission of the Fire Chief or designated representative.

5.12.2. Items such as trees, bushes, signs, fences, or any obstacles will not obstruct or conceal a fire hydrant, post indicator valve, sprinkler, or standpipe connection.

6. Fire Prevention - Family Housing Occupancies:

6.1. Specific Fire Prevention Measures.

***6.1.1.** Military Family Housing sponsors are responsible for fire prevention measures in their quarters. Occupants must schedule and receive a fire prevention briefing within 30 days of occupying family housing quarters. This briefing is mandatory for first time housing sponsors, and is highly recommended that all sponsors receive our briefing to understand Sheppard AFB fire prevention policies.

6.1.2. Ensure the emergency reporting number, 9-1-1, is posted near the phone. Stickers are provided by the fire department.

6.1.3. Test the smoke detector(s) monthly by pressing the test button or lever. Report any problems immediately to housing maintenance. Activation of smoke detectors installed in military family housing does not send a signal to the fire department.

6.1.4. Clean the smoke detectors at least twice a year by brushing the units exterior with a soft brush or cloth. Hold a vacuum near the unit to collect the dust particles.

6.1.5. Recommend Military Family Housing occupants invest in a fire extinguisher for their quarters. The best fire extinguisher for home use is a multipurpose dry chemical with a minimum 2A: 10B: C rating.

6.1.6. Never leave cooking unattended.

6.1.7. When in use, outdoor cooking equipment will be placed at least 15 feet from the structure. Do not place them under roofs or overhangs. Use only proper lighter fluid to start grill fires and never leave grills unattended.

6.1.8. Housing area outside storage room may be used for storing outdoor cooking equipment when the equipment is not in use. Propane type fuel units shall have fuel lines disconnected from the fuel tanks when not in use.

6.2. Storage and Housekeeping.

6.2.1. Flammable and combustible materials must be stored in the proper containers and kept in the outside storage area, inaccessible to children.

6.2.2. A maximum of 5 gallons of flammable liquids may be stored in the outside storage area.

6.2.3. Periodically clean the oven, range top, and extractor unit filters to avoid a build-up of grease.

6.2.4. Periodically clean clothes dryers, hoses, and vents to avoid a build-up of combustible lint. Vent hoses must be attached to the installed connector which vents directly to the outside.

6.2.5. Keep all matches, lighters, and other flame-producing devices out of reach of children.

6.2.6. Do not store anything in the attic space, hot water tank closet, or heater closet.

6.2.7. Do not block electrical panels.

6.2.8. Recommend developing an evacuation plan and practicing the plan at least semi-annually.

7. Fire Prevention - Public Assembly Occupancies:

7.1. Definition: Public Assembly occupancies include, but are not limited to, facilities, or portions of, used for gathering together 50 or more people for such purposes as deliberation, worship, entertainment, eating, drinking, amusement, college or technical training classrooms/auditoriums, or awaiting transportation.

7.2. Employee Certification Process.

7.2.1. Managers of public assemblies will establish and maintain a certification system for all employees IAW AFOSH 91-56. The certification process will include at a minimum, documented quarterly training for employees on fire prevention and fire protection features of their facility, review and execution of building evacuation procedures (participation of patrons is not necessary), and immediate indoctrination of newly hired employees.

7.2.2. A certification program folder will be maintained with the documented training reports. Documentation may also be maintained in the Facility Manager's Guide.

7.3. Specific Fire Prevention Procedures.

7.3.1. Make sure the facility is in a fire safe condition at the close of business by conducting and documenting a daily closing inspection. Notifying the fire department upon completion is not necessary.

7.3.2. Maintain the occupant load information in the manager's office. Every room constituting an assembly and not having fixed seats shall have the occupant load of the room posted in a conspicuous location near the main exit from the room. Occupant load information will be provided by the fire department.

7.3.3. Notify the fire department of all major events which involve temporary decorations and/or unusual arrangements. Fill out a Special Events Checklist and return to Fire Prevention Section at least 3 days prior to the event.

***7.3.4.** Natural-cut Christmas trees are not permitted.

***7.3.5.** No Christmas trees will be allowed to obstruct corridors, exit ways, means of egress, or other fire detection/suppression devices.

***7.3.6.** Artificial Christmas trees shall be labeled or otherwise identified or certified by the manufacturer as being "Flame Retardant" or Flame Resistive."

***7.3.7.** Only listed electrical lights and wiring shall be used on Christmas trees and similar decorations.

***7.3.8.** Electrical lights are prohibited on metal artificial trees.

7.3.9. Check exits daily to ensure that doors are unlocked and unobstructed prior to allowing patrons in. Chaining exit doors during periods of occupancy is strictly prohibited.

7.3.10. Candles may be used on tables if securely supported on substantial noncombustible bases, located to avoid contact with combustible materials, and the candle flame protected.

7.3.11. "Flaming Sword" or other equipment involving open flames and flamed dishes, such as cherries jubilee, crepes suzette, etc., are permitted provided proper precautions have been taken. At a minimum, maintain a safe distance from all combustible materials and have an "ABC" rated fire extinguisher within reach.

7.3.12. All other open-flame devices, such as pyrotechnic devices, will be approved by the fire department prior to use.

7.3.13. All draperies, curtains, and other similar furnishings and decorations must be flame resistant.

7.3.14. Clothing and personal effects will not be stored in corridors or lobbies.

7.3.15. In Class A public assemblies (more than 1,000 people), there will be crowd management supervisors posted at a ratio of 1 to every 250 people. These crowd management supervisors will be trained by fire department personnel in procedures to direct the safe evacuation of patrons.

7.4. Cooking Operations.

7.4.1. Thoroughly clean installed grease filters, exposed surfaces of kitchen range hoods, and associated cooking equipment daily to prevent accumulation of grease. Ensure the cleaning is documented and the documentation readily available.

7.4.2. Provide spare filter sets in kitchens that operate continuously. Do not cook under a range hood without the filters in place.

7.4.3. Operate the exhaust system at all times while cooking. If the exhaust fan is out of service, cooking will be discontinued until it is repaired.

7.4.4. Installed dry chemical system nozzles must remain unobstructed and free of grease accumulation. Cooking will not be performed without the dry chemical extinguishing system operational.

7.4.5. Deep fat fryers must be equipped with a primary thermostat to limit temperature to 400 degrees F. The second thermostat must be nonadjustable, fusible or manual resetting, with a maximum cut-off temperature of 475 degrees F. Thermostats will be tested annually and after repair. Testing and maintenance is accomplished by the civil engineers or a certified contractor. Documentation of the test will be affixed to the unit. The fire department will witness the testing process.

8. Fire Prevention - Industrial, Storage, and Special Occupancies:

8.1. Definitions.

8.1.1. Industrial: Occupancies involved in making products of all kinds and properties, devoted to operations such as, processing, assembling, mixing, packaging, finishing, and repairing.

8.1.2. Storage: Occupancies involved in storing or sheltering goods, materials, merchandise, products, vehicles, or animals.

8.1.3. Special: Occupancies involved in a distinctive process or an unusual type of facility (i.e., control tower).

8.2. Employee Fire Prevention Training. Conduct fire evacuation/prevention training at least semi-annually. Training will include:

8.2.1. Evacuation procedures. Follow procedures as defined in Section 5.

8.2.2. Fire extinguisher operation. All personnel working on or around aircraft will receive training on wheeled flight line extinguishers in addition to portable fire extinguishers.

8.2.3. Fire prevention practices.

8.3. Specific Fire Prevention Procedures.

8.3.1. All sources of ignition will be strictly controlled.

8.3.2. Flammable and combustible materials not in use will be stored in closed containers and kept inside approved incidental storage holders or flammable storage lockers.

8.3.3. Industrial exhaust systems will be checked monthly to ensure the system is operating properly and combustible material is not building up within the duct work.

8.3.4. Where an explosive atmosphere is possible, electrical wiring and heating units will be rated explosion proof in accordance to the appropriate class and division.

8.3.5. Oily rags will be stored in metal containers with tightly sealed lids and appropriately marked on the outside of the container.

8.3.6. When storing materials, follow guidance set forth in DoD 4145.19-R-1 and AFMAN 23-210.

8.3.7. Maintain clear aisle space and easy accessibility to fire protection system components, fire extinguishers, fire exits, fire doors, and electrical components.

8.3.8. Do not store combustible materials against the outside of buildings or under loading docks.

8.3.9. Store combustible packing materials, such as excelsior and shredded paper, in fire-resistant bins or containers with self-closing lids.

8.3.10. When stock height is 15 feet or less, maintain at least 18 inches of clearance from sprinkler heads, fire detectors, and light fixtures.

8.3.11. When stock height exceeds 15 feet, allow a minimum of 36 inches clearance from sprinkler heads, fire detectors, and light fixtures.

8.3.12. Significant changes to floor layout, arrangement of materials, blocking of aisles, doors, etc., will be approved by the fire department prior to the changes occurring.

8.3.13. Maintain a clear aisle space of at least 25 inches between stored combustible material (including supplies packed in combustible containers) and interior fire walls/partitions. Materials may be stored against the outside walls if the walls are noncombustible and the materials do not present a special hazard.

8.3.14. Ensure fire doors are provided the proper clearance for the working mechanism and objects are not stored in the path of the door.

8.3.15. Maintain ammunition/explosives in accordance with AFM 91-201.

9. Fire Prevention - Mercantile Occupancies:

9.1. Definition: Occupancies including stores, markets, and other rooms, buildings, or structures used for the display and sale of merchandise.

9.2. Employee Fire Prevention Training.

9.2.1. Employees of mercantile occupancies will receive fire prevention training prior to starting on the job, and at least semi-annually. The training will include, as a minimum:

9.2.2. Evacuation procedures. Follow procedures as defined in Section 5.

9.2.3. Fire extinguisher operation.

9.2.4. Fire prevention practices.

9.3. Specific Fire Prevention Procedures.

9.3.1. Established aisles will remain clear during hours of operation.

9.3.2. Special promotions/displays involving abnormal materials and/or areas will be approved by the fire department prior to set-up.

9.3.3. Under no circumstances will fire exits be blocked, locked, or otherwise obstructed during hours of operation. All fire exits will be operated prior to the start of business to ensure free and unobstructed opening.

10. Fire Prevention - Business Occupancies:

10.1. Definition: Those occupancies used for the transaction of business, other than that covered under mercantile. Activities include keeping accounts, maintaining records, processing paperwork, college or adult technical training classrooms under 50 persons, etc.

10.2. Employee Fire Prevention Training.

10.2.1. Employees will participate in fire evacuation/prevention drills/training procedures at least semiannually.

10.2.2. Employees will be instructed on fire extinguisher operation at least annually.

10.3. Specific Fire Prevention Procedures.

10.3.1. Do not store anything in exit corridors or stairwells. This includes furniture which decreases the corridor width.

10.3.2. Ensure furniture, decorations, etc., do not block fire alarm pull stations, exit lights, or come within 18 inches of sprinkler heads and fire detectors.

11. Fire Prevention - Educational Occupancies:

11.1. Definition: Facilities or portions of facilities used for educational purposes through the 12th grade by 6 or more persons for 4 or more hours per day or more than 12 hours per week. The Child Development Center is included in this occupancy classification.

11.2. Specific Fire Prevention Procedures for the Child Development Center and the Youth Activities Center.

11.2.1. Clothing and personal items will not be stored in the corridors unless contained within metal lockers.

11.2.2. Recommended staff to child ratio is:

Staff Ratio	Age
1:3	0 to 2
1:5	2 to 3
1:10	3 to 5
1:12	5 to 7
1:15	7 and over

11.2.3. Monthly fire prevention inspections will be conducted by a trained senior member of the staff. A copy of the form used during the inspection will be posted in a conspicuous place in the facility.

11.2.4. Ensure all exit doors are unlocked and operational daily, prior to occupancy.

11.2.5. The approved fire evacuation plan will be executed not less than once per month. Ensure the drills are documented.

11.2.6. Classes will meet at an outside meeting point and teachers will account for their children. Missing children will be immediately reported to the senior staff member who will inform the fire chief.

11.2.7. Flammable and combustible liquids shall be stored in areas accessible only to staff members.

11.2.8. Wastebaskets and other waste containers in Child Development Centers shall be made of non-combustible or flame-resistant materials.

11.2.9. Child-prepared artwork and teaching materials can be attached to the wall but will not exceed 20 percent of the wall surface. The intent is to avoid creating a continuous combustible surface across the room.

11.3. Specific Fire Prevention Procedures for Educational Occupancies Serving Grades K-12.

11.3.1. Fire drills will be conducted regularly. There shall be two fire exit drills held during the first 2 weeks of a school term and eight additional exit drills held during the year.

11.3.2. Drills will be executed at different times of the day and during different functions of the school.

11.3.3. Each fire drill is an exercise in school management for principals and teachers, with the chief purpose of the drill being the control of the class to allow expedient and efficient evacuation of the pupils.

11.3.4. Classes will meet at an outside meeting point and teachers will account for their pupils. Missing students will be immediately reported to the principal who will inform the fire chief.

11.3.5. Staff will inspect all exit doors and exit paths daily to ensure doors operate freely and paths are clear.

11.3.6. Clothing and personal effects shall not be stored in corridors or lobbies unless contained within metal lockers.

12. Fire Prevention - Family Home Day Care Occupancies:

12.1. Definition: Occupancies where less than seven children receive care, maintenance, and supervision by other than their relatives or legal guardians for less than 24 hours per day, and have been licensed as Family Home Day Care facilities.

12.2. Specific Fire Prevention Procedures.

12.2.1. Home must be equipped with a functioning telephone with emergency numbers posted.

12.2.2. Monthly fire drills will be conducted and documented.

12.2.3. Evacuation plans must be prepared and followed during monthly fire drills.

12.2.4. No smoking is permitted while children are under care.

12.2.5. Children will be under constant supervision.

12.2.6. Have an approved smoke detector in each room where the children sleep.

12.2.7. Replace batteries in battery-operated smoke detectors not less than semiannually and document it.

12.2.8. Test battery operated smoke detectors weekly, all others once a month.

12.2.9. At least one, minimum rated 2A: 10B: C fire extinguisher will be maintained in the residence at the provider's cost.

13. Fire Prevention - Hotel, Motel, Dormitory Occupancies:

13.1. Definition: Buildings or spaces used to provide sleeping/living accommodations for more than 16 people who are not members of the same family. These occupancies include, billeting quarters, permanent party and student dormitories, and temporary living facilities.

13.2. Billeting Employee Fire Prevention Training.

13.2.1. Employees of billeting occupancies will receive fire prevention training prior to beginning the job and every month thereafter.

13.2.2. The training will include:

13.2.2.1. Duties they will perform in the event of a fire or other emergency.

13.2.2.2. Operation of fire extinguishers.

13.2.2.3. Notification of the fire department and use of the alarm system.

13.2.2.4. General fire prevention topics.

13.2.2.5. Evacuation of guests.

13.3. Specific Fire Prevention Procedures.

13.3.1. A floor diagram reflecting the actual floor arrangement, exit locations, and room identification will be posted in each room either on or adjacent to each door in guest or resident rooms.

13.3.2. A fire safety briefing guide will be provided to each guest staying in billeting quarters.

13.3.3. Fire drills will be conducted at least semi-annually in dormitory occupancies.

13.3.4. The types of heat producing devices allowed in these occupancies are limited to coffee makers, microwave ovens under 1,000 watts, hot air popcorn poppers, hair dryers, curling irons, and appliances already provided in the room. These devices must be UL or FM listed, used for their intended purpose, and supervised while in operation.

13.3.5. The following types of heat producing devices are not permitted in hotel/motel, dormitory occupancies; electric skillets, hot plates, deep-fat fryers, candles, incense, coffee pots used with timers and other similar devices.

13.3.6. Occupants will not, under any circumstances, tamper with the installed fire detection, alarm, or suppression systems. This specifically includes the smoke detectors provided in each sleeping area.

13.3.7. Personnel will not be permitted to sleep in rooms without operational smoke detectors.

13.3.8. Permanent party dormitory residents will test their smoke detectors monthly.

13.3.9. Flammable liquids will not be stored inside any dormitory room.

13.3.10. Barbecue grills must be positioned at least 15 feet from any structure when in use. Under no condition will barbecue grills be allowed on the landings or walkways of the outside walkway style dormitories.

***13.3.11.** Natural-cut Christmas trees are not permitted.

***13.3.12.** No Christmas trees will be allowed to obstruct corridors, exit ways, means of egress, or other fire detection/suppression devices.

***13.3.13.** Artificial Christmas trees shall be labeled or otherwise identified or certified by the manufacturer as being "Flame Retardant" or Flame Resistive."

***13.3.14.** Only listed electrical lights and wiring shall be used on Christmas trees and similar decorations.

***13.3.15.** Electrical lights are prohibited on metal artificial trees.

14. Fire Prevention - Health Care Occupancies:

14.1. Definition: Occupancies used for the purposes such as medical treatment or care of persons suffering from physical or mental illness, disease or infirmity; and or for the care of infants, convalescents, or infirm aged persons.

14.2. Specific Fire Prevention Procedures.

14.2.1. The health care occupancy must develop a written fire reaction plan, coordinated through and approved by clinical engineering personnel within the health care facility and the fire department.

14.2.2. A copy of the plan will be readily available at all times.

14.2.3. Employees will be trained on the plan prior to beginning work in the section.

14.2.4. Fire exit drills (execution of the reaction plan) shall be conducted quarterly on each shift and documented/maintained. Drills should be as realistic as possible, without involving movement of infirm or bedridden patients. Actual fire alarm transmission should occur. At least four drills will be conducted each year, for each shift. Drills conducted between 2100 and 0600 may use a coded announcement instead of audible alarms.

14.2.5. Coordinate drills with the fire department prior to commencement.

14.2.6. Draperies, curtains, and other similar furnishing and decorations must be flame resistant.

14.2.7. Wastebaskets and other waste containers shall be of noncombustible or flame-resistant construction.

14.2.8. Space heater use must comply with the following directives:

14.2.8.1. Life Safety Code section 13-7.7 to include the exception.

14.2.8.2. Joint Commission Accreditation of Health Care Organizations (JCAHO).

14.2.8.3. Hospital Instruction 32-3.

14.2.9. Hospital fire safety representatives must make daily walk-throughs of areas under construction/ renovation within the health care facility to ensure fire safe conditions.

15. Fire Prevention - Contractors Working on Base:

15.1. Specific fire prevention procedures will be supplied to each contractor prior to starting work. The procedures are outlined in the Contractors Fire Prevention Brochure.

15.1.1. Contractors are provided a fire prevention briefing prior to starting any work on base.

15.1.2. Contractors are responsible for training their employees on the fire prevention measures outlined in the briefing and contained within the guide provided during the preconstruction conference.

15.1.3. Contractors are obligated to report all fires immediately, even fires which are extinguished prior to the arrival of the fire department.

15.1.4. Materials and equipment will not be stored in a location or manner which will create a fire exposure to adjacent facilities.

15.1.5. Construction offices and sheds will not be located within 25 feet of any existing building.

15.1.6. Contractors must coordinate the use of fire hydrants with the fire department.

15.1.7. Contractors must comply with welding, cutting, brazing and open burning operations as specified in paragraph 16.

16. Fire Prevention - Welding, Cutting, Brazing and Open Burning Operations:

16.1. Welding, cutting, brazing, or any operation requiring the use of an open flame will be one of the following:

16.1.1. Inside areas specifically designed for welding and cutting operations as defined in AFOSH 91-5 that do not require USAF Welding, Cutting and Brazing Permit, (AF Form 592). Inspections will be incorporated with normal building inspections by a Fire Prevention Technician. All outside areas will comply with AFOSH 91-5 and shall have a AF Form 592 before work can begin.

16.1.2. Organizations, contractors, or individuals wanting to utilize inside areas not specifically designed for welding and cutting operations shall submit a letter, with a building diagram of the area, to the base fire department for approval.

16.1.3. Inside areas not specifically designed for welding and cutting operations are required to have a special inspection before approval can be granted, to insure compliance with AFOSH 91-5. The Fire Prevention Technician will incorporate future inspections with normal building inspections.

16.1.4. Approval letter review will be accomplished annually. Renewal of the approval letter will be accomplished when the following occurs:

16.1.4.1. Using organization changes.

16.1.4.2. Approval is revoked through failure to comply to standards.

16.1.4.3. Major renovations have been performed to the area which required alterations to the existing safety equipment. Normal final project inspections will serve as the required inspection for approval if the request is submitted in a timely manner.

16.2. Welding, cutting, and brazing operations conducted on equipment or property of Sheppard Air Force Base will comply with AFOSH Standard 91-5.

16.3. 82d Civil Engineer Squadron supervisors, Hospital Safety Officer, and permanent maintenance contractor supervisors may be approved to issue permits for routine work after being trained in the procedures, precautions, and with the approval of the base fire chief.

16.4. Specific Fire Prevention Procedures.

16.4.1. All welding, cutting, brazing and burning operations must be performed by qualified personnel.

16.4.2. Permits will not be issued for more than 30 consecutive days.

16.4.3. Hot work will not be permitted in the vicinity of combustible, flammable, or explosive materials. Where the removal of materials is impractical, a suitable fire resistant shield, fire protection standby, and/or both will be provided prior to starting operations.

16.4.4. Before welding on gas pipes, tanks or other containers, which have contained flammable liquids or gas, the containers will be thoroughly purged and filled with water or inert gas. To ensure an explosive atmosphere is not present, the area and container are sampled using a combustible/explosive gas detector.

16.4.5. Before beginning hot work, personnel will ensure they have a fully operational fire extinguisher in close proximity to the operation and are trained to use it.

17. Storage and handling of Flammable/Combustible Liquids, Corrosive Substances, and Flammable Gases:

17.1. General flammable/combustible liquids procedures.

17.1.1. All flammable and combustible liquids must be handled with care and diligence to avoid an accidental fire.

17.1.2. The guidelines in this instruction apply to flammable/combustible liquids having a flash point of 200 degrees or less. Combustible liquids with a flash point above 200 degrees will be stored neatly and away from heat sources.

17.2. Specific flammable/combustible liquids procedures.

17.2.1. Flammable/combustible liquids will be used and stored in accordance with AFOSH Standard 91-43 and NFPA Standard 30.

17.2.2. Inside flammable/combustible storage locations must have written approval by the fire department. The approval (permit letter) must be maintained in the fire prevention folder (facility manager's guide) and/or posted on the flammable storage locker.

17.2.3. Steps for acquiring a flammable/combustible storage permit:

17.2.3.1. Facility managers will submit a letter, along with a floor diagram, requesting storage of flammable/combustible liquids within their facility. The contents and amounts contained within storage lockers must be included or attached to the letter.

17.2.3.2. The fire department will evaluate the request, check the area for proper precautions as outlined in AFOSH 91-43 and NFPA Standard 30.

17.2.3.3. After all the proper measures are in place, the approval letter (permit) is signed by the base fire chief. The permit is valid as long as the fire prevention measures are maintained and the contents do not change.

17.2.4. Flammable/combustible liquid storage permits will be renewed every year. Permits must be re-accomplished prior to changing contents or locations. The control and issue of hazardous materials, to include flammable and combustible liquids, is managed by the Base Hazardous Materials Office located at Building 21.

17.2.5. Flammable/combustible liquid storage permits may be revoked at any time by the fire department for failure to adhere to fire prevention standards.

17.2.6. Incidental flammable/combustible storage areas are permitted in industrial occupancies provided the guidelines of AFOSH 91-43 are adhered to. Permits are not required for incidental storage areas however, the fire department will be consulted prior to establishing the area.

17.2.7. No permit is required for outside storage of flammable/combustible liquids. The fire department will be consulted prior to establishing an outside flammable/combustible storage area.

17.2.8. During contract, in-house, or self-help projects, a one day supply of combustible paints and thinners can be kept on the job site. At the end of the day, all contaminated rags, paper, flammable liquids, etc., will be removed from the building.

17.2.9. Dispensing and storage units, such as tanks and drums, will be suitably grounded at all times. Nozzles used to dispense flammable liquids will be spring loaded or otherwise self-closing when hand pressure is released. Under no circumstances will they be wired, tied, or bolted open when dispensing flammable liquids.

17.2.10. All cleaning tanks and vats, filled with flammable or combustible liquids, will be equipped with self-closing metal lids with fusible links. Only solvents designated for the purpose of cleaning will be used in the tanks or vats.

17.2.11. Under no circumstances will flammable liquids be used for any purpose other than that intended by the manufacturer.

17.3. Corrosive Substance Storage Procedures.

17.3.1. Corrosive substances will be stored in an approved corrosive cabinet.

17.3.2. Flammable/combustible liquids, solids, or gases will not be stored in the same cabinet with corrosives.

17.3.3. Corrosive storage cabinets require an approval letter (permit). Utilize the same format and procedures as outlined for flammable storage lockers.

17.4. Specific Procedures for Flammable Gas Cylinders. Nonliquefied and liquefied flammable gas cylinders will be stored inside buildings wherever possible when the proper indoor precautions have been provided. All other nonliquefied and liquefied flammable gas cylinders will be stored outside of buildings in an approved cylinder storage area. This includes spare cylinders, empty or full. Cylinder storage areas will conform to the guidance set-forth in T.O. 42B5-1-2 and National Fire Code standard 55. Exception: Cylinders attached to welding equipment (i.e. welding cart).

18. Fire Prevention Program Support:

18.1. Fire Prevention Visit Program.

18.1.1. The fire department will conduct a fire prevention visit to each facility or occupancy at least once each year. Certain occupancies are visited more often, as set forth in regulation, code, or law, or when determined necessary by the fire department. The person accompanying the fire prevention technician makes on-the-spot corrections of minor discrepancies. Major discrepancies, along with the corrective actions, are recorded on the AF Form 1487, Fire Hazard Inspection Report. The fire department will make follow-up visits to ensure the deficiency/hazard has been corrected.

18.1.2. The fire department will also conduct periodic, unannounced walk-through visits of various facilities as a quality check of the overall fire prevention program.

18.1.3. Facility managers and commanders can request a supplemental fire prevention visit at any time and/or address any technical questions regarding fire prevention/protection to the Fire Prevention Section.

18.2. Fire Prevention Education Program.

18.2.1. The fire department will assist the base populace by providing training, demonstrations, evacuation drills, lectures, tours, etc., at the request of facility managers, section supervisors, or commanders. Contact the Fire Prevention Section, 6-2104, to set up the training needed. Written request is not necessary.

18.2.2. The fire department will also assist groups, such as the scouts, schools, and clubs, with training, lectures, tours, demonstrations, etc., to support their programs.

18.2.3. The fire department will present fire prevention information to the base population throughout the year. Personnel are encouraged to visit the fire department and utilize any of the fire prevention information available.

19. Forms Prescribed:

19.1. AF Form 332, **Base Civil Engineer Work Request.**

19.2. AF Form 592, **USAF Welding, Cutting and Brazing Permit.**

19.3. AF Form 1487, **Fire Prevention Visit Report.**

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